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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,682	08/03/2006	Daniel W. Mayer	MCN226USPT02	4858

23403 7590 03/20/2009  
SHERRILL LAW OFFICES  
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SUITE 212  
WHITE BEAR LAKE, MN 55110-3205

EXAMINER
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GISSEL, GUNNAR J

ART UNIT	PAPER NUMBER
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2856

NOTIFICATION DATE	DELIVERY MODE
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03/20/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

michaels@sherrilllaw.com  
izag@sherrilllaw.com  
docketing@sherrilllaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,682	<b>Applicant(s)</b> MAYER ET AL.	
	<b>Examiner</b> Gunnar J. Gissel	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/2009</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer (5,212,993) in view of Armstrong et al. (4,776,206).

Regarding Claim 1, Mayer discloses an instrument comprising: a needle having a lumen (Mayer, needle 12); a vacuum pump in fluid communication with the lumen defined by the needle for evacuating gas from a hermetically sealed packaging (Mayer, pump 30), and in fluid communication with the mass flow rate sensor wherein the instrument is effective for evacuating gas from a hermetically sealed packaging through the lumen in the needle (Mayer, pump 30).

Mayer does not explicitly disclose that the instrument comprises a mass flow rate sensor.

Armstrong discloses a mass flow sensor that permits continuing mass flow from the packaging and is in communication with the package via the lumen (Armstrong, mass flow sensor 26, figure 1). Armstrong discloses a device that uses the rate of positively pressurizing a package to determine leakage, but one skilled in the art would recognize that the rate of negatively pressurizing a package would exhibit similar

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characteristics, and that it would be possible to use the similar characteristics to determine if a package is leaking.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine Armstrong's mass flow sensor with Mayer's leak detector, because Armstrong's method of looking at the initial rate of flow is much faster than other methods (Armstrong, column 2, lines 48-61).

Regarding Claim 2, Mayer discloses an instrument comprising: a needle having a lumen (Mayer, needle 12); an oxygen sensor in sealed fluid communication with the lumen defined by the needle (Mayer, sensor 18); and a vacuum pump in fluid communication with the lumen defined by the needle (Mayer, pump 30) wherein the instrument is effective\_for (i) pumping a sample of a gas from within a hermetically sealed packaging through the lumen of the needle and into operable contact with the oxygen sensor for permitting sensing of an oxygen concentration of the sample (Mayer, figure 1, pump 30; the configuration shown would be effective for removing any or all gas from the package through the needle and into contact with the oxygen sensor), (ii) evacuating the gaseous content of the hermetically sealed packaging (Mayer, pump 30; column 10, lines 20-30).

Mayer does not explicitly disclose a mass flow rate sensor.

Armstrong discloses a mass flow sensor that permits continuing mass flow from the packaging and is in communication with the package via the lumen (Armstrong, mass flow sensor 26, figure 1). Armstrong discloses a device that uses the rate of positively pressurizing a package to determine leakage, but one skilled in the art would

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recognize that the rate of negatively pressurizing a package would exhibit similar characteristics, and that it would be possible to use the similar characteristics to determine if a package is leaking.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine Armstrong's mass flow sensor with Mayer's leak detector, because Armstrong's method of looking at the initial rate of flow is much faster than other methods (Armstrong, column 2, lines 48-61).

Regarding Claim 3, Mayer discloses a method comprising the steps of: selecting a hermetically sealed packaging (Mayer, column 2, lines 62-68); puncturing the hermetically sealed packaging with a hollow needle having a lumen (Mayer, figure 2); evacuating any gaseous content from within the hermetically sealed packaging through the lumen of the needle to form a vacuum within the hermetically sealed packaging (Mayer, column 4, lines 10-59). For the purposes of examination, "vacuum" is defined as "an enclosed space from which matter, especially air, has been partially removed so that the matter or gas remaining in the space exerts less pressure than the atmosphere" ("vacuum." *Dictionary.com Unabridged (v 1.1)*. Random House, Inc. 13 Mar. 2009. <Dictionary.com <http://dictionary.reference.com/browse/vacuum>>.).

Mayer does not explicitly disclose measuring the mass flow rate.

Armstrong discloses a mass flow sensor that permits continuing mass flow from the packaging and is in communication with the package via the lumen (Armstrong, mass flow sensor 26, figure 1). Armstrong discloses a device that uses the rate of positively pressurizing a package to determine leakage, but one skilled in the art would

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recognize that the rate of negatively pressurizing a package would exhibit similar characteristics, and that it would be possible to use the similar characteristics to determine if a package is leaking.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine Armstrong's mass flow sensor with Mayer's leak detector, because Armstrong's method of looking at the initial rate of flow is much faster than other methods (Armstrong, column 2, lines 48-61).

Regarding Claim 4, Mayer discloses a method comprising the steps of: selecting a hermetically sealed packaging (Mayer, column 2, lines 62-68); puncturing the hermetically sealed packaging with a hollow needle having a lumen (Mayer, figure 2); pumping a sample of the gas within the hermetically sealed packaging through the lumen of the needle and into operable contact with an oxygen sensor for sensing the oxygen concentration in the sample (Mayer, column 4, lines 10-59); evacuating the gaseous content from within the hermetically sealed packaging through the lumen of the needle to form a vacuum within the hermetically sealed packaging (Mayer, column 10, lines 20-30).

Mayer does not explicitly disclose measuring the mass flow rate.

Armstrong discloses a mass flow sensor that permits continuing mass flow from the packaging and is in communication with the package via the lumen (Armstrong, mass flow sensor 26, figure 1). Armstrong discloses a device that uses the rate of positively pressurizing a package to determine leakage, but one skilled in the art would recognize that the rate of negatively pressurizing a package would exhibit similar

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characteristics, and that it would be possible to use the similar characteristics to determine if a package is leaking.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine Armstrong's mass flow sensor with Mayer's leak detector, because Armstrong's method of looking at the initial rate of flow is much faster than other methods (Armstrong, column 2, lines 48-61).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunnar J. Gissel whose telephone number is (571)270-3411. The examiner can normally be reached on Mon-Fri, 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571)272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/GJG/

3/13/2009

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856